This listing of claims will replace all prior versions and listings of claims in the application:

1-40. (CANCELED)

41. (Previously Presented) A recombinant, non-replicative, non-infectious, lentiviral transfer vector, comprising:

non-infectious lentiviral nucleic acids, wherein the vector is deprived of functional genes encoding lentiviral Gag, Pol, and Env proteins;

a polynucleotide for transduction of cells, comprising a lentiviral, cis-acting central initiation region, which is the central polypurine tract ("cPPT"), and a lentiviral, cis-acting termination region, which is the central terminator sequence ("CTS"), wherein the cPPT and CTS are cis-acting in reverse transcription and are for formation of a DNA triplex, and wherein the cPPT and CTS are derived from a retrotransposon;

a defined nucleotide sequence (transgene or sequence of interest); and

regulatory signals for reverse transcription, expression, and packaging, wherein said regulatory signals are of retroviral or retroviral-like origin;

and wherein the DNA triplex transfers the defined nucleotide sequence into the nucleus of a cell.

42. (Previously Presented) A recombinant vector according to claim 41, wherein the transgene or the sequence of interest is contained in an expression cassette comprising regulatory signals for transcription and expression.

43. (Previously Presented) A recombinant vector according to claim 41, wherein the regulatory signals for reverse transcription, expression, and packaging, and

the polynucleotide comprising the cPPT and CTS regions are derived from an HIV-type retrovirus.

44. (Previously Presented) A recombinant vector according to claim 41, wherein the lentiviral nucleic acids are HIV-1 or HIV-2 nucleic acids, and the regulatory signals consist of HIV-1 or HIV-2 nucleic acids.

45. (Previously Presented) A recombinant vector according to claim 41, wherein the polynucleotide is a DNA sequence comprising the cis-acting central initiation region (cPPT) and the termination region (CTS) of an HIV-1 retroviral genome.

46. (Previously Presented) A recombinant vector according to claim 41, wherein the polynucleotide comprises the cPPT and CTS regions of a sequence selected from SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, and SEQ ID NO: 33, or one of these sequences mutated by deletion or insertion of one or more nucleotides, provided that the polynucleotide permits the formation of a triplex on reverse transcription of the vector under the control of suitable regulatory elements.

47-49. (Cancelled)

50. (Previously Presented) A recombinant vector according to claim 41, wherein the regulatory signals for reverse transcription, expression and packaging, and the polynucleotide comprising the cPPT and CTS regions are derived from a yeast retrotransposon.

51. (Previously Presented) A recombinant cell comprising a vector according to claim 41.

52-65. (Cancelled)

66. (Currently amended) A recombinant, non-replicative, non-infectious, lentiviral transfer vector, comprising:

non-infectious lentiviral nucleic acids, wherein the vector is deprived of functional genes encoding lentiviral Gag, Pol, and Env proteins;

a polynucleotide for transduction of cells, comprising a lentiviral, cis-acting central initiation region, which is the central polypurine tract ("cPPT"), and a lentiviral, cis-acting termination region, which is the central terminator sequence ("CTS"), wherein the cPPT and CTS are cis-acting in reverse transcription and are for formation of a DNA triplex;

a defined nucleotide sequence (transgene or sequence of interest); and

regulatory signals for reverse transcription, expression, and packaging, wherein said regulatory signals are of retroviral or retroviral-like origin;

and wherein the DNA triplex transfers the defined nucleotide sequence into the nucleus of a cell.

67. (Previously Presented) A recombinant vector according to claim 66, wherein the transgene or the sequence of interest is contained in an expression cassette comprising regulatory signals for transcription and expression.

68. (Previously Presented) A recombinant vector according to claim 66, wherein the regulatory signals for reverse transcription, expression, and packaging, and the polynucleotide comprising the cPPT and CTS regions are derived from an HIV-type retrovirus.

69. (Previously Presented) A recombinant vector according to claim 68, wherein the lentiviral nucleic acids are HIV-1 or HIV-2 nucleic acids, and the regulatory signals consist of HIV-1 or HIV-2 nucleic acids.

70. (Previously Presented) A recombinant vector according to claim 66, wherein the polynucleotide is a DNA sequence comprising the cis-acting central initiation region (cPPT) and the termination region (CTS) of an HIV-1 retroviral genome.

71. (Previously Presented) A recombinant vector according to claim 66, wherein the polynucleotide comprises the cPPT and CTS regions of a sequence selected from SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, and SEQ ID NO: 33, or one of these sequences mutated by deletion or insertion of one or more nucleotides, provided that the polynucleotide permits the formation of a triplex on reverse transcription of the vector under the control of suitable regulatory elements.

72. (Previously Presented) A recombinant vector according to claim 66, wherein the regulatory signals for reverse transcription, expression and packaging, and the polynucleotide comprising the cPPT and CTS regions are derived from a yeast retrotransposon.

73. (Previously Presented) A recombinant cell comprising a vector according to claim 66.

74-77. (Cancelled)

78. (New) A non-infectious particle comprising the vector of any one of claims 41 to 46 or 50 to 51 inside a protein envelope of the non-infectious practice.

79. (New) A non-infectious particle according to claim 78, wherein Gag, Pol, and Env proteins from an HIV retrovirus are provided by one or more additional vector(s).

80. (New) A non-infectious particle according to claim 79, wherein the HIV retrovirus is HIV-1 or HIV-2.

81. (New) A non-infectious particle according to claim 80, wherein Gag and Pol proteins from an HIV retrovirus are provided by one or more additional vector(s), and Env proteins from a different HIV retrovirus or from a virus is provided by an additional vector.

82. (New) A non-infectious particle comprising the vector of any one of claims 66 to 72 in a protein envelope.

83. (New) A non-infectious particle according to claim 82, wherein Gag, Pol, and Env proteins from an HIV retrovirus are provided by one or more additional vector(s).

84. (New) A non-infectious particle according to claim 83, wherein the HIV retrovirus is HIV-1 or HIV-2.

85. (New) A non-infectious particle according to claim 84, wherein Gag and Pol proteins from an HIV retrovirus are provided by one or more additional vector(s), and Env proteins from a different HIV retrovirus from a virus is provided by an additional vector.

86. (New) A method of *ex vivo* transfection or *ex vivo* transduction of non-mitotic differentiated cells, comprising transfecting or transducing the recombinant vector as claimed in claim 41 or claim 66 into non-mitotic differentiated cells.

87. (New) A method of *ex vivo* transfection or *ex vivo* transduction of primary cells or immortalized cells lines, comprising transfecting or transducing the recombinant vector as claimed in claim 41 or claim 66 into primary cells or immortalized cells lines.

88. (New) A method of *in vivo* transduction, comprising providing a recombinant vector as claimed in claim 41 or claim 66 and transducing the recombinant vector *in vivo*.

89. (New) The method of claim 88, wherein the *in vivo* transduction further comprises injection of the recombinant vector into a tissue.

90. (New) A recombinant particle, comprising:

(a) a GAG polypeptide corresponding to a nucleoprotein of a lentivirus, or to a functional polypeptide derivative (GAG polypeptide);

(b) a POL polypeptide constituted by the RT, PRO, and IN proteins of a lentivirus, or a functional polypeptide derivative (POL polypeptide);

(c) an envelope polypeptide or a functional polypeptide derivative (ENV polypeptide); and

(d) a recombinant nucleotide sequence, comprising:

a defined nucleotide sequence (transgene or a sequence of interest), placed under the control of first regulatory signals for transcription and expression; a sequence containing second, lentiviral regulatory signals for reverse transcription, expression, and packaging, wherein the regulatory signals are of lentiviral origin; and a polynucleotide for transduction of cells comprising a central initiation region (cPPT) and a termination region (CTS), wherein the cPPT and CTS are inserted in a functional orientation with said second regulatory signals, and wherein the ccPPT and CTS are

cis-acting in reverse transcription and form a DNA triplex on reverse transcription of the recombinant nucleotide sequence;

and wherein the DNA triplex transfers the defined nucleotide sequence into the nucleus of a cell.

91. (New) A recombinant particle according to claim 90, wherein the regulatory signals for reverse transcription, expression, and packaging, and the polynucleotide comprising the cPPT and CTS regions are derived from a HIV-type retrovirus.

92. (NEW) A recombinant particle according to claim 91, wherein the HIV-type retrovirus is HIV-1 or HIV-2.

93. (New) A recombinant, non-replicative, non-infectious, lentiviral transfer vector, comprising:

non-infectious lentiviral nucleic acids, wherein the vector is deprived of functional genes encoding lentiviral *Gag*, *Pol*, and *Env* proteins.

a defined nucleotide sequence (transgene or a sequence of interest), placed under the control of first regulatory signals for transcription and expression; a sequence containing second, lentiviral regulatory signals for reverse transcription, expression, and packaging; and a polynucleotide for transduction of cells consisting of a lentiviral central initiation region (cPPT) and a lentiviral termination region (CTS), wherein the cPPT and CTS are inserted in a functional orientation with said second regulatory signals, and wherein the cPPT and CTS are cis-acting in reverse transcription and form a DNA triplex on reverse transcription of the recombinant nucleotide sequence when under the control of the second regulatory signals;

and wherein the DNA triplex transfers the defined nucleotide sequence into the nucleus of a cell.